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ABSTRACT

Facilities and staff, financing, administration, and social/behavioral problems are four areas of the educational systems of rural schools impacted by the rapid population growth resulting from the urban-to-rural migration begun in the 1970's and expected to last several decades. Overcrowding of facilities is a short-range problem for communities with economic and public support, but a long-range problem for those unable to initiate a satifactory solution. Greater local revenues result from greater population, yet there may be rural resistance to the ideas of urban newcomers. Short-range administrative problems and paperwork overloads occur with increased school population. Social/behavioral problems, such as discipline and alcohol misuse, also increase. Educational systems will experience both positive and negative effects of the growth process, but substantial economic and social costs can be avoided with early long-range planning. The extent to which rural community leaders should and can anticipate and respond to population growth and its resultant changes is critical. Scenarios of two different rural communities--a "boomtown" and a town exemplifying "social amenities growth"--demonstrate that the impacts of rapid growth on rural education are significantly influenced by economic and social factors in the larger community arena. (SB)

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IMPACTS OF THE RURAL TURNAROUND ON RURAL EDUCATION

by

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CONTENTS

		Page
I.	INTRODUCTION	1
	Objectives	2
	Background	2
	Trends in Migration	2
	Rural Education Trends	5
	Migration and Education	6
	Organization of the Report	8
II.	THE RURAL TURNAROUND	9
	Features of the Turnaround	9
	Factors Causing the Turnaround	12
	Characteristics of Migrants	13
	Orientations toward Education	13
	Prospects for the Future	14
III.	TURNAROUND IMPACTS ON RURAL EDUCATION	15
	Social Change Perspective on Rapid Growth	15
	The Impacts	17
	Criteria for Evaluating Impacts	18
	Conditions Affecting Impacts	18
	Kinds of Impacts	19
IV.	EDUCATIONAL SCENARIOS IN TWO RAPID GROWTH COMMUNITIES	24
	Approach	24
	Reliance	25
	General Setting	25
	Educational System	27
	School-Community Relations	28
	Responses to Impacts	30
	Appaloosa	31
	General Setting	31
	Educational System	32
	School-Community Relations	35
	Responses to Impacts	35
	Contrasts	36
V.	SUMMARY AND IMPLICATIONS	39
	Summary	39
	Implications	41
	BIBLIOGRAPHY	45
	ABOUT THE AUTHORS	49

IMPACTS OF THE RURAL TURNAROUND ON RURAL EDUCATION

I. INTRODUCTION

The seventies marks the beginning of "The Great Population Turnaround in America" (Schwarzweller,1978: p. 1). The dominant trend of rural-to-urban migration which spanned many decades has reversed (Beale,1975,1976, 1977). A major factor underlying the turnaround is migration away from the largest cities.[1] Since 1970, net migration into rural and small town areas exceeds two million people, largely migrating from metro areas (Economic Development Division, 1978: p. 6).

Population experts reacting to the surprise and even skepticism about early claims of a population reversal have hastened to confirm and to document the turnaround (Campbell and Johnson, 1976; Fuguitt and Beale, 1976; Zuiches and Brown, 1978). Other researchers have concentrated on describing the turnaround migrants and their reasons for migrating (De Jong and Humphrey, 1976; Ploch, 1978 ; Thomas and Bachtel, 1978; Williams and Sofranko, 1978; Voth, et. al., 1979). However, little attention has been given thus far to the consequences of the turnaround for communities undergoing change. "The consequences of migration and population redistribution are difficult to specify, of course. They involve not only population growth or decline and demographic disturbances per se, but also have social, economic, and political dimensions" (Schwarzweller, 1978: p. 19).

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[1] In this report, use of the term, turnaround, emphasizes an increase in net inmigration in nonmetro areas. From 1970 to 1975, for example, the aggregate population increase in nonmetro America was 3.6 million of which 51 percent (1.8 million) was due to net migration and the remainder (1.7 million) attributed to natural increase (balance of births and deaths). In contrast, in the 1960's, the same areas grew by only 2.3 million in ten years. All of this was from natural increase as 3.0 million net outmigration occurred.

Objectives

Acknowledging the need to understand the consequences of the turnaround, this report focuses on the impacts of rapid population turnaround on rural educational systems. The specific objective is to examine the range of impacts of rapid population growth on educational systems in rural communities. Restricting the concern to rural areas with population gains in no way minimizes the importance of studying the consequences of the turnaround for education in communities (both rural and urban) experiencing population loss.

Background

It is useful to review briefly the major U.S. trends in migration and education and the linkages between the two. In keeping with the focus of this report, trends affecting the rural sector are emphasized.

Trends in Migration

Current discussions (e.g., Beale, 1978; Zuiches and Brown, 1978) of migration trends frequently focus on two time periods -- 1940 to 1970, and 1970 to present.

The decades during 1940-1970 exemplify the height of a dominant trend in the country dating back to the 1800's--the urbanization of America. Urban population over the years has increased more rapidly than rural population. "Beginning in 1940, the defense buildup, economic recovery, and compulsory military service...combined to produce a tide of movement out of the countryside" (Beale, 1978: p. 40). During the decades following 1940, the net migration of people leaving farms, rural hamlets and other nonmetro areas numbered in the millions with substantial numbers moving into cities (Beale, 1975).

The primary motivation for the rural exodus was economic gain. People moved seeking better jobs and higher pay along with improved living conditions. Migration to the cities enabled many, particularly the skilled and educated, to realize economic gains and higher standards of living. However, migrants who were poor and undereducated frequently could not find better jobs and decent places to live. This generated concern for these migrants and their poor counterparts, who were "left behind...often worse off than before" (National Commission on Rural Poverty, 1967: p. 6). Nonetheless, metropolitan concentration dramatically continued during the 1950's, with only a slight let-up during the 1960's.

The rural exodus was anticipated and expected by economists. With his general theory of economic stagnation, Tweeten (1968: pp. 18-21) argued that areas with lower birth rates, higher levels of education, superior transportation and communication, sociocultural orientations toward change, and proximity to urban-industrial complexes have greater capacity to adjust to inevitable changes in resources, products, and technology. Thus, with basic need satisfactions involved, farmers and other rural people could be expected to respond to the advantage of higher wages in urban areas through migration.

First claims of a turnaround occurring during the 1970's came unexpectedly in 1975 when demographer Calvin Beale (1974, 1975) reported that from 1970-1973 nonmetro areas gained 4.2 percent population compared to 2.9 percent for metro areas. "The vast rural-to-urban migration of people that was the common pattern of U.S. population movement in the decades after World War II has been halted, and, on balance, even reversed" (Beale 1975: p.3).

Turnaround skeptics speculated that the 1970-1973 findings reflected an increased rate of urban sprawl into adjoining nonmetro areas. Subsequent work by Beale (1976) demonstrated a 1970-1974 population growth of 5.6

percent for nonmetro counties compared to 3.4 percent for metro counties, figures up from the initial findings. Furthermore, counties adjacent to Standard Metropolitan Statistical Areas (SMSA's) grew 6.3 percent while nonadjacent counties increased by 4.9 percent. These data might support partially the arguments of urban sprawl, except that entirely rural counties grew by 6.1 percent contradicting urban sprawl as a total explanation for the turnaround (see table 1).

Table 1--Population change by metropolitan status, United States, 1970-74

Item	Number of counties	Percentage change in population, 1970-74
	No.	Pct.
Total United States	3,097	4.0
Metropolitan	628	3.4
Nonmetropolitan	2,469	5.6
Adjacent	969	6.3
Nonadjacent	1,500	4.9
Entirely rural	623	6.1

SOURCE: Beale, 1976, p. 954, as prepared from: U.S. Department of Commerce, Bowles, Beale, and Lee, Net Migration of the Population, 1960-70, by Age, Sex, and Color, 1975.

Finally, the most recent data (U.S. Department of Commerce, 1978) confirming the turnaround indicate that from 1970-1977, population of nonmetro areas grew by 9.3 percent compared with 5.3 percent for metro areas.[2] A more detailed discussion of the turnaround appears in Section II.

[2]Rates reflect population adjustments for areas changing from nonmetro to metro status through November, 1973.

Rural Education Trends

Jonathan Sher (1977) discussed several distinctive aspects of rural public education. One is diversity. "Rural education encompasses everything from a one-room school house in an Appalachian hollow to a Western school district responsible for education within a several hundred square mile region. It includes both units having lots of students but very little money, and units with lots of money but very few students" (Sher, 1977: p. 3). Rural schools also share several common problems including nonenrollment, recruitment of staff, and difficulty in providing supplementary services. Educational attainment has been a particularly disturbing problem with recent data showing "that rural children score significantly lower than the U.S. average in almost every subject area (Sher, 1977: p. 4). On the other hand, Sher (1977) observed that rural schools have been able to maintain a unique atmosphere for education because of size and close relations between schools and their communities.

Rural education has still undergone notable change since the late 1800's (Rosenfeld and Sher, 1977). One trend is dominant, and a few others, while important, are secondary.

The dominant trend stemming from reform efforts in education to urbanize or to modernize rural education is consolidation. In 1940, there were 117,000 school districts in the U.S. decreasing 86 percent to 16,960 in 1972 (table 2). The number of elementary schools dropped 65 percent from 1940 to 1972, and the number of one-teacher schools had almost reached zero.

Table 2--Number of public schools and districts in the United States, 1940-1972

Year	Number of districts	Number of elementary schools		Number of secondary schools
		Total	One-teacher	
1940	117,000	185,000	114,000	25,000
1950	84,000	128,000	60,000	24,000
1960	40,000	92,000	20,000	25,000
1970	18,000	66,000	2,000	25,400
1972	16,960	64,945	1,475	25,922

SOURCE: Rosenfeld and Sher, 1977, p. 41, as prepared from: Digest of Educational Statistics (Washington, D.C.: U.S. Office of Education, National Center for Educational Statistics, 1974).
Figures prior to 1972 were rounded.

Attempts to conform rural education to an urban model created a nearly uniform public educational system throughout America, although the results were not always viewed favorably.

> Rural school reform had significant effects on community life in rural America. By transferring control from the community to hired professionals, the traditional sense of involvement, intimacy, and identification existing between rural parents and their schools was diminished. By inaugurating a formalized, standardized, and urbanized education system, the traditional continuity between rural education and rural life was weakened. And by inculcating rural children with urban values, urban aspirations, and urban skills, the reformers encouraged outmigration while discouraging the preservation and improvement of traditional rural schools and communities (Rosenfeld and Sher, 1977: pp. 41-42).

Migration and Education

The trends in migration and education are intricately linked, each influencing the course of the other. For rural areas, heavy outmigration prior to 1970 lowered educational attainment of the remaining population through selectivity of younger, better educated rural people. Although the proportion of 16 and 17 year old rural youths who were in school in 1970 was

comparable to the proportion of urban youths in the age range, farm youths with higher educations leaving the farm by age 20 depressed the educational level of the younger rural population (Bogue and Beale, 1964: p. 103). At the same time, dominant events in education fostered attitudes and values among rural youths which encouraged migration away from rural areas.

Costs were often greater to rural communities as demonstrated in one Kentucky study of financial equity for primary and secondary education in a predominant family farm area. Flora underscored the links between outmigration and education inequities:

> On the one hand, the people of the school district pay to educate the individual. This investment is a mobile one, affecting both the individual's occupation and income, and is only lost through death. On the other hand, the return to the investment for the community is more nebulous. Not only does the outmigration of young people represent a net 'human capital' outflow from the community, but it also distorts the age structure so that persons in the productive age groups must pay for services for more people than is true...in urban areas (1974: 176).

Nonmetro to metro migration 1970-1975 continued to be selective of better educated youth. Forty-six percent of nonmetro whites moving to metro areas had some college training compared to 18 percent of their nonmover counterparts (Fratoe, 1978: p. 33). At the same time, 34 percent of metro migrants moving to metro areas between 1970 and 1975 had completed some college, compared with 17 percent of nonmetro nonmovers (all races), and metro-nonmetro movers had higher incomes and were younger than nonmetro nonmovers (Zuiches and Brown, 1978: pp. 65-66).

Organization of the Report

The remainder of the report is organized in four sections. Section II focuses on major features of the turnaround (including patterns of nonmetro growth in the U.S. and factors causing growth) and describes the turnaround migrants and their reasons for migrating. Different impacts of the turnaround on the rural schools and education are discussed from a social change perspective in Section III. Factors which may influence the nature and degree of impacts are also considered. Section IV develops and compares case study scenarios of two school districts representing prototypes of areas experiencing rapid growth for different reasons and with different effects. In the final section, attention is given to the implications for educators and policymakers at local, State and Federal levels concerned with strategies for responding to the effects of the turnaround.

II. THE RURAL TURNAROUND

Where, to what degree, and why is the turnaround from metro to nonmetro areas occurring? Who are the new migrants?

Features of the Turnaround

The map shown in Figure 1 illustrates general patterns of turnaround in the U.S. It depicts four levels of 1970-1975 population change rates calculated from census data among nonmetro counties: population growth 20 percent and over, 5-19 percent, 0-4 percent, and population loss. Metro counties are uncolored.

Seventy-five percent of the 2,485 U.S. counties classified as nonmetro gained populations, 1970-1975. However, the growth for the large majority of gainers was less than 10 percent. Eighty of the 2,485 counties increased 30 percent or more in population, and of these 25 counties had a 50 percent or greater gain. In many cases, growth was mainly due to net inmigration, although natural increase (changes in births and deaths) which also affects population change rates accounted solely for some increases such as several Southwestern counties, the sites of Indian reservations where birth rates were up.

Growth in nonmetro counties from 1970-1975 was 6.6 percent (4.1 for metro counties). Grouping nonmetro counties according to degree of urban orientation and adjacency to SMSA's,[3] (Hines, Brown and Zimmer, 1975) rates of growth were highest for nonmetro urban adjacent counties (7.8 percent) and totally rural adjacent counties (7.7 percent) and lowest among non-adjacent

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[3] A classification of U.S. counties into 10 groups (4 metro and 6 nonmetro) with urbanized, less urbanized and totally rural categories of nonmetro counties designated as having 20,000 urban residents, 2,500-19,999 urban and no urban residents. Further divisions are made on the basis of adjacency or non-adjacency to an SMSA.

less urban counties (5.4 percent). However 1970-1975 population change rates for all nonmetro groups were higher than the 4.8 percent rate for the U.S. (Ahearn, 1979).

Counties gaining over 20 percent or more in population are located in several general geographic areas of the country. The largest group of these counties is concentrated in several Southwestern states encompassing an area stretching northward through the intermountain region and including parts of Northeast Washington state. Other areas are located in parts of Florida, Central Ozarks, Upper Great Lakes, Central Texas and a line of counties on the West Coast and along the California - Nevada border.

Counties with moderate growth (10-19 percent) are generally located in areas branching out from the high growth areas described above, especially the intermountain region, West Coast, Ozarks and Upper Great Lakes. In addition, a group of counties located in Central Appalachia (Southern Appalachian coal fields, Blue Ridge, Great Smokies, and Great Valley) underwent moderate population increase.

Population losses were most apparent in four areas of the country. The largest region marked by substantial population decline is the Great Plains (Northern Great Plains, Southern Great Plains) extending into West Central Texas, the Mississippi Delta, the Corn Belt and a crescent-shaped area in the Old Coastal Plain Cotton Belt of Central Alabama and Georgia.

Counties with slight growth are scattered throughout the U.S., but some concentration occurs in the Great Plains and the South.

p.10 Nonreproducible map deleted

Factors Causing the Turnaround

While the catalyst for the rural-to-urban migration patterns prior to 1970 was primarily economic, both economic and non-economic factors are accounting for the new migration stream (Williams and Sofranko, 1978). Some of the most rapid growth, particularly in parts of the West and Appalachia, stems from expansion of extractive industry for energy sources including coal, gas, oil and other minerals (Beale, 1977). Another economic motivation for growth, especially in the South, is the decentralization of manufacturing with many companies establishing plants in small towns and rural areas. Expanding post-secondary educational and recreational developments are also generating growth in many areas throughout the country (Williams and Sofranko, 1978; Beale, 1975, 1977; Voth, et al., 1979).

A strong non-economic basis also underlies the turnaround. Migration is occurring not because of economic necessity but to enhance the quality of life (Ploch, 1978: p. 301). This includes countless retirees moving to new nontraditional areas of retirement outside the Sunbelt, members of the back-to-the-earth movement moving for environmental reasons, and others moving because of preferences for the social amenities of life in small towns and rural places (Campbell et al., 1977; DeJong and Humphrey, 1976; Ploch, 1978; Thomas and Bachtel, 1978). In short, "the new migration to nonmetro areas is being generated by motivations different from those which have characterized long distance moves in the past...and...are different from those characterizing the metro-nonmetro migration stream currently" (Williams and Sofranko, 1978: p. 21).

Characteristics of Migrants

Although a national tendency exists for new migrants to be younger, better educated, and of higher socioeconomic status than native populations (Zuiches and Brown, 1978), characteristics vary substantially by region, state and sub-state areas. Migrants moving into three areas of Arkansas -- Ozarks, Delta, and River Valley -- differed greatly in social and demographic characteristics and in their reasons for moving (Voth, et al., 1979). In Southeastern Ohio, new migrants represented full ranges of ages, educations, incomes and occupations although the average socioeconomic level was higher than that of the native population (Thomas and Bachtel, 1978). Migrant workers in an energy developing area of Wyoming were younger, married, better educated and earned higher incomes than the natives (Nellis, 1974).

Orientations Toward Education

New migrants who are younger, better educated and from urban areas may have different values, attitudes and orientations toward education. They often value participation in local decision-making as in the case of in-migrants in Maine who not only supported improvements in education but also participated in community affairs often by running for election to school boards (Ploch, 1978). When the migrants are primarily older retirees, effects for education may be of a different kind. Retired persons on fixed incomes are less prone to support bond issues and increased taxation for education (Voth and Danforth, 1978).

It is important to be aware of the primary factors precipitating turnaround and the characteristics of in-migrants. The next section considers in more detail the impacts of rapid population growth for rural educational systems which are believed to be influenced by the unique interplay of demographic, economic, political and social factors.

Prospects for the Future

Looking ahead to the next decades, what are the chances that the present trend of reverse migration to nonmetro areas will continue? Few will disagree that the evidence confirming the turnaround fully documents that the trend is a real one. Many will disagree, however, about explanations of why the trend has occurred and what the long-term effects may be. Calvin Beale recently reflected:

> "the future course of internal migration is not possible to predict with any precision, any more than the pattern of this decade was clearly foreseen in the last. The flow and location of people goes through on endless succession of adjustments. Major demographic trends are rarely confined to the span of a single decade,... and the net flow of people to the South and West and to the rural areas and smaller metropolitan areas will continue...in the 1980's... Migration decisions are made on a comparative basis, in which people weigh the relative merit of their present environment and situation with that which some other location might offer. Thus actions that can improve the total quality of life in a community or region having outmovement can alter the push factor in migration and reduce the propensity to leave (1978b, p. 8).

III. TURNAROUND IMPACTS ON RURAL EDUCATION

There is no simple prescription to predict how rapid growth in a population will impact on rural education. Existing evidence suggests that a complex network of conditions affects the ways rapid population growth impacts upon a community and its educational system. This section presents a social change framework for understanding the consequences of rapid population growth and analyzes the likely impacts of rapid growth on educational systems and the types of conditions under which the impacts may occur.

Social Change Perspectives on Rapid Growth

Extensive treatment of sociological theories of social change is beyond the scope of this report and the interest of the primary intended audience of educators and community leaders. However, to view rapid population growth in a general context of community change provides a useful framework for this report. Four points are stressed:

1. Drastic changes in the size and/or composition of a community's population can cause social change, which refers to the ways and mechanisms (groups, organizations) through which community members relate on a daily basis. This happens because people moving in and out of the community are carriers of new ideas and ways of doing things (Schwarzweller, 1978: p. 3).

2. Education, as a social institution, is included as an integral part of a larger social system, the community. It is important to remember that, "Rural schools do not exist in a vacuum. They are an integral part of rural communities and rural society and are affected by the forces at work within and upon rural society" (Moe and Tamblyn, 1974: p. 1). Education is one of many social institutions, organizations and other groups which together form a basis through which community members can relate. Changes

arising inside and outside the community will affect, to varying degree, all the functional areas of community.

3. Social change in a community occurs at different rates, and the rate of change will affect the outcomes for a community and its members. Gradual social change may be easily accommodated with slight awareness of the change and little disruption. However, communities and social institutions (such as education), faced with rapid change, may go through a time or stage of disorganization necessitating adjustments which can have both positive and negative results.

Bertrand (1963, 1966) used the notion of confrontation to describe one stage of a three stage process. In the first stage of awareness, recognition of the change occurs. In the second stage of confrontation, the group is confronted with the necessity of adapting to new ways and to new ideas with adaptation involving both conflict and cooperation. The third, final stage is total accommodation to the change.

4. The distinction between crescive change and purposive change is important for understanding and responding to social change. Warren (1972: p. 362) identified crescive change as "change which occurs and will be occurring independent of our own direct intervention," and purposive change as "change which a social actor is deliberately seeking to bring about." Crescive changes are uncontrolled forces of change such as decreasing supplies of natural and mineral resources, the growing centralization of decision-making at the national level, or altered attitudes and values toward religion while purposive changes reflect attempts to adapt to changes already and inevitably taking place.

The degree to which rapid population growth associated with the turnaround represents cresive change is a matter of current debate. Some analysts of rapid growth associated with energy development suggest that local governments can take steps to control rates of growth (Peelle, 1978), while others (Armbrust, 1977: p. 13) assert that "local government's control or influence over the location, timing or scale of energy facilities is much more limited than over the subsequent local development it induces."

The Impacts

Within this framework, rapid population growth acts as a catalyst for rapid social change often confronting rural communities and particularly rural educational systems with immediate problems of dealing with both large increases in students and with new ideas, expectations, values and behavior modes. One analyst studying the social impacts of nuclear energy plants observed, "the educational system can be one of the most severely impacted areas in communities experiencing rapid growth" (Greene and Curry, 1967). This observation probably reflects accurately one of the ways educational systems will be impacted, if the magnitude of this growth is great. In such situations, however, rapid growth can impact positively on schools by increasing local revenues for education which in turn leads to improved scope and quality in programs and staff.

Thus, evaluating the kinds of impacts that rapid growth may have on education requires a consideration of certain criteria by which evaluations are made and of the different conditions which affect the extent and nature of the impacts.

Criteria for Evaluating Impacts

Four questions regarding possible impacts help to facilitate understanding impacts: (1) Is the impact primary or secondary? (2) Are the consequences mainly positive or negative for the educational system? (3) Are the effects likely to be short-range or long-range? (4) Are there different effects for different segments of the community such as school administrations, students and families, community members at large, local government and businesses?

In the case of rapid growth, reports of impacts often concentrate on the primary (initial) short-range, problems (negative) from the perspective of the school. The reality is usually that adaptations to social change have both positive and negative results, although the positive gains may not be immediately realized or recognized.

Conditions Affecting Impacts

A unique interplay of demographic, economic, social and educational factors will determine the kinds of impacts on education in any given situation.

Demographic. The sheer magnitude of growth and particularly the number of new school-age children coming into a school district affect how schools will be impacted. Major demographic characteristics of newcomers (age, marital status, education, sex, occupation, income) also influence what impacts rapid growth may have. Demographic characteristics of the native population are also a factor. For example, a population made up of a large number of retirees living on fixed incomes may be less favorable to increased taxation for schools than younger-aged populations.

Economic. Impacts will be strongly affected by the bases and status of the local economy. An economic boom, characterized usually by rapid high rates of population growth and economic growth, will operate to determine impacts different from an area with its economy not growing at a rate commensurate with its population expansion. In the economic boom situations, impacts reach far across all sectors of the community touching many aspects of daily living.

Social. A myriad of social (and cultural) conditions can determine the kinds of impacts from rapid growth. These include not only the arrangements of social relations in the community (formal and informal groups) but also the prevailing values and attitudes which shape social relations.

Educational. The structure of education at state and local levels also operates to affect impacts. The state system of financial support for schools is a critical factor, as well as other regulations and requirements governing what happens in local school districts. The local governance of schools and the relation to community and county officials also may play a role in structuring how rapid growth may impact on education.

Kinds of Impacts

Again, general prescriptions for how rapid population growth will impact on rural education are risky. Researchers and planners can help by supplying data, but each community needs to evaluate carefully its own unique situation. The following discussion considers some of the ways that rapid population growth might impact on schools and education.

Facilities and Staff. Assuming that rapid population growth brings an increase in the number of school age children,[4] one of the primary expected impacts is overcrowding (e.g., Nellis, 1974). There also may be a shortage of teachers and staff, as well as an increased need for counselors and other support specialists.

Excess capacity of some schools permits them to handle moderate increases in enrollment; however, severe overcrowding often necessitates drastic steps by the school officials such as double-shifting, conversion of "non-essential" space into classrooms, and use of portable buildings and arrangements to use other public or private facilities for various purposes.

Sudden overcrowding usually creates an immediate, problem for school officials and stresses for staff, students and their families. However, if moves to alleviate the problems (including new school construction and other capital improvements) are successful, overcrowding becomes a primary but short-range impact.

School districts in communities experiencing economic growth stand a better chance of gaining voter approval for bonds to build new schools. Rapid industrial development usually means a marked increase in the local tax base, and taxes from industry and business often provide a large proportion of local monies for education.

When overcrowding turns into a persistent problem unrelieved by provision for new facilities, it can become the dominant concern for school

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[4]Substantial and rapid population growth does not always mean substantial changes in school population. Greene and Curry (1977: p. 6) noted that 2,500 construction workers moved in a county in Maryland adding only 250 students to the school population.

officials and a major issue of public attention. Short-term overcrowding, in itself, probably does not affect the general quality of education, but long-term overcrowding may seriously impair the quality of instruction and the performance of students.

If rapid growth leads to capital improvements, the long-range outcomes will mean more adequate and improved facilities for education.

Finances. A second primary impact of rapid growth is in the area of school finances. In areas where the economy is rapidly growing, increased revenues for education can provide local resources for better educational systems through the development of staff, programs and special services. Varying by state and locality, financial resources may become inadequate to support growth, and long-term inability to relieve financial strains can have serious detrimental effects.

A case of rapid growth in Oregon (Hennigh, 1978) illustrated another kind of impact on financial resources. Oregon requires local voter approval of annual budgets for education, and, in this rural Oregon community, rapid influx of urban migrants (quickly participating in organizations and local decision-making) resulted in a taxpayer revolt against funding for schools. Hennigh (1978) who conducted the case study observed that the revolt actually represented citizen demands for greater participation in local decision-making for schools. Urban newcomers who move into rural communities often have expectations for education different from the existing school leadership, and opposition to increased financial support can become a means to bring about other changes in the educational system.

Administration. Similarly, challenges to other policies and programs of the local administration is a related kind of impact. Ploch (1978: p. 497)

cited instances of conflicts between newcomers and long-time Maine residents over educational issues such as required reading and the establishment of family life courses, with newcomers generally taking more liberal positions. This kind of impact can occur with or without increased school enrollment.

From a positive long-range perspective, rapid growth can bring new blood to educational leadership through newcomers working in the schools or participating as citizens in educational capacities. Such newcomers can stimulate improved changes in programs and resources.

The drastic turnover in students, often accompanying rapid growth, creates another sort of administrative problem. Paperwork load associated with many in-and-out students, particularly in areas where plants and industries are located, frequently taxes office staff and requires adding new personnel.

Social/Behavioral. Rapid growth may bring a rise in a host of social problems, including classroom discipline, increased use of drugs and alcohol, and higher incidences of vandalism, truancy, non-attendance, out of wedlock pregnancies, child abuse, and broken homes. Such problems tend to occur in communities undergoing drastic growth, such as Western energy boomtowns. Social problems of this nature are associated with a general rapid growth malady identified as the "Gillette Syndrome" (Civin, 1978; Kohrs, 1974). Young families moving into booming areas frequently have to live in mobile homes (adequate under ordinary conditions) in severely crowded locations subject to inadequate water and sewage facilities, the heat of the summer, and the mud of rainy seasons. Living in such crowded and undesirable conditions results in psychological and emotional breakdowns, leading to divorce, child-abuse, alcoholism, and juvenile problems (Freudenburg, 1978).

A long-range social gain from rapid growth can come from more cosmopolitan experiences and orientations of new students and their families.

The examples noted above serve to illustrate only some of a complex, interrelated set of ways that rapid growth impacts education. It is likely that rapid growth will impact in multiple ways on any single educational system, some of which will have detrimental effects, at least in the short-run, and some of which will have positive effects. Ways of minimizing the negative impacts of rapid growth are discussed in Section V.

IV. EDUCATIONAL SCENARIOS IN TWO RAPID GROWTH COMMUNITIES

The following scenarios characterize the educational systems in two rapid growth rural communities. Reliance and Appaloosa, pseudonyms given to the "prototype" communities, were purposively chosen because they were believed to exemplify energy and social amenities growth, two of several different types of growth underlying the present metro-to-nonmetro migration turnaround.

Both communities are located in states west of the Mississippi. Since 1970, Reliance has experienced over a 50 percent increase in its county population (1 percent decline in 1960's), and county growth for Appaloosa has dramatically jumped by over 100 percent (2.6 percent increase in 1960's). Data (U.S. Department of Commerce, 1977) for 1970-1975 components of change indicate that approximately 90 percent of the growth in these communities was due to increased net migration, with the remainder due to natural increase (excess of births over deaths).

Approach

The following general approach was used. (1) Extension staff, typically community resources development specialists at the land grant university, along with selected officials in state departments of education, were approached for basic data about schools and the communities and for an entree into the school districts. (2) In both instances, county extension agents supplied a list of key informants among school officials and community leaders who were contacted by mail to solicit their cooperation in the study. (3) A team of researchers conducted in-depth interviews with initial informants and other persons identified after arriving at the study sites.

In addition to obtaining basic information about the community, interviews centered around several areas of educational organization and function-

ing: finances, administration, staff, facilities, programs and curricula, students, and parent-school-community relations. Structured interview instruments were not used. Supplemental data consisted of statistics and material assembled from files, records, newspapers, and published sources.

Steps were taken to minimize interviewer and interviewee biases. At the onset, informants were assured of complete confidentiality and that neither they nor their communities would be identified. Information was always obtained from multiple sources, and the same questions were pursued with different informants until responses began to converge. Each of the two interviewers recorded information during and/or after interviews and any points of disagreement were clarified through follow-ups with informants.

Based on data from the case studies, the scenarios portray (1) the general community setting, (2) the educational systems as impacted by rapid growth, (3) school-community relations, and (4) ways school districts and communities have coped with the impacts.

Reliance

General Setting

Reliance is a relatively small community of Anglo Americans (92 percent) in the South Central region. The remaining eight percent are mainly Hispanic with a small number of Blacks. Its population is estimated to be 6,879 (1978) having increased 16 percent between 1970 and 1978. However, the population of the county containing Reliance grew 50 percent reaching a population of approximately 14,000 in 1978. The increase is of particular concern to the Reliance school system which is the larger of only two school districts in the county. Intensifying the concern is the awareness that many of the newcomers are retirees, who may prefer services other than education.

The economic base of Reliance reflects several major realities: it is a county seat community in a sparsely populated general area; it is a supply center mainly for ranchers who produce livestock on grasslands that receive an average of 30 inches of rainfall per year; and employment opportunities are scarce, being associated with a clothing firm (60 employees) and a feed mill (60 employees). A turkey processing plant, employing 190 people, was closed in 1976. Per capita income in 1974 was $3,182, up 38 percent from $2,301 in 1970. For a number of years, Reliance has also maintained economic ties with a large military installation in a neighboring county. Reportedly, over 500 persons commute 40 miles daily to civilian jobs at the base.

The base has also been a primary source of growth recently. More than 200 retirees in the Reliance area are ex-military. An even larger number of enlisted personnel and officers residing in the county have moved into trailer parks and new residential developments. Thus, a major cause of the growth is residential preferences for the Reliance area. The economy is not growing accordingly, however.

The social base seems to be centered in church and school groups. Sixteen churches provide opportunities for the people of Reliance to interact frequently. An absence of theatres and youth-oriented recreational facilities likely enhance participation by youths in the church and school-sponsored recreational activities which are available. Deer hunting, fishing, rodeoing, and horseback riding are popular past-time activities. Sale of alcoholic beverages is illegal in Reliance and its county, but beer is available nearby at outlets located just over the county line.

The political structure of Reliance includes three major elements. First, county government is comprised of a county judge and four county

commissioners, each having their own precinct and equipment. Second, it has a part-time mayor, along with a five-member city council. Third, there is a seven-member school board elected by place and serving three-year terms. The school board, comprised mainly of ranchers before 1972, now includes a lawyer, highway patrolman, female newspaper reporter, contractor, bookkeeper, service station manager, and the wife of an attorney. There is also an active Chamber of Commerce and Industrial Development Foundation, whose members seek to attract firms.

Educational System

Reliance, larger by far of the two districts in the county, has one primary school with kindergarten through second grade, one elementary with grades 3 through 5, one middle school with grades 6 through 8, and one high school. Total school enrollment, excluding 100 kindergarten students,[5] was 2,267 in 1978, up almost 40 percent from 1,626 in 1970. This increase has been accommodated without additional permanent structures.

Thus, a persistent major issue has been how to provide space for so many new students. This issue was temporarily resolved by renting the National Guard Armory in 1972 for a token annual fee, purchasing numerous portable classroom buildings, and using the auditorium and the library in the high school building as classrooms. The Armory houses the kindergarten students and other special education classes. The high school building, constructed in 1955, was designed to accommodate 400 students but has 750 students at present. This is possible through use of the auditorium, library and a portable building for classes.

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[5]These students are educationally and/or economically disadvantaged. Other kindergarten-age children will be eligible for a part-year program beginning mid-season. Many attend private school.

Revenue to operate the school system is almost $3,100,000, 1978-79 school year. Of this amount, approximately $800,000 comes from the local level, $2,000,000 from the State, and $300,000 from the Federal Government.[6] This is a per pupil expenditure of $1,378.

The appraised value of real estate in the school district containing Reliance is estimated to be $85 million. Starting in 1978, the assessed value for support of schools is 68 percent[7] of the base of $85 million, or $58 million. For school support, this is taxed at a rate of $1.50 per $100. At collection rates of 90 to 100 percent, this will yield revenue of $756,000 to $800,000. Appraisals have not been updated for several decades. Thus, tax inequities have supposedly developed, operating against newer homeowners, and favoring older homeowners and landowners.

School leaders increased the number of faculty members in 1978 to 142, up from 134 in 1976. The pupil/teacher ratio averages 25-30/1. Beginning salary level for teachers, ten month unit, is $8,540 following the state pay scale. Officials reported that the school district could not afford to add a subsidy above the state scale.

School-Community Relations

From the perspective of the school administrators and teachers, persistent severe overcrowding has been the major problem. Students and staff

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[6]Reliance received aproximately $100,000 in Aid to Federally Impacted Areas under P.L. 874. Other monies are awarded under Title I, and Title I Migrant, Title IV.

[7]In the state containing Reliance, varying levels of assessment percentages and rates are made depending upon function. Revenue for the county is currently based on a 20 percent assessment rate and a tax rate of $0.75 per $100. Revenue for Reliance is based on a 25 percent assessment rate and a tax of $1.40 per $100.

experience daily frustrations of overcrowded science labs, libraries, dining rooms and hallways as well as use of space for unintended purposes.

It is not surprising that people in such a situation would be advocates of additional resources for the schools. On the other hand, those with new homes, retirees trying to live on fixed incomes, and ranchers trying to raise cattle with droughts frequently occurring are believed to be less receptive to such pleas.

There have been two major attempts in recent years to get approval of bond issues to build new school buildings in or near Reliance. The first of these attempts occurred in 1972. Approval for issuance of $2.5 million in bonds for a new high school building and other related improvements was rejected 4 to 1. The last attempt was in May, 1978. Voters rejected by 3 to 1 a proposal for a $5.15 million bond issue mainly for a new high school building and a new elementary school building to be located in a nearby community. The results were announced in the May 25th issue, "School District Voters Reject Bond Issue for New Facilities." Results indicated that in small outlying ranching communities, the ratios against the proposal were 6 to 1, 7 to 1, 8 to 1, 20 to 1, and 22 to 1. In Reliance, the vote was 1,599 against and 733 for (2 to 1).

Articles in the local newspaper indicate that at least one school board member openly opposed the bond issue on several grounds. Chances for passing another bond issue in the new future were in the words of one principal (and long-time resident) "probably zero."

Opposition to the school operations in another form was evident too. A citizen's group (many newcomers) had organized to express concern about county services and tax inequities. A parent-based move was underway to

transfer Reliance students living in one area of the county into the neighboring school district. If this happened the loss of the school district tax monies and the Federal Impact aid monies associated with these students would be serious.

Responses to Impacts

The initial, main impact of the turnaround on Reliance schools was severe overcrowding. Steps taken to counteract overcrowding (portable buildings, maximum utilization of space) provided immediate, although unsatisfactory, solutions. Attempts at more adequate long-range solutions through new school construction not only failed to gain voter approval but may have contributed to both dissatisfactions with schools from some groups and concerns with tax inequities and/or tax hikes among several groups. As an independent taxing unit, the school district arranged for a reassessment of property values. When asked how much the school district could expect to gain, one official noted that at least the issue of unfairness would be momentarily resolved.

To counteract organized parental attempts to transfer students to another school district, officials met with members and negotiated to keep the students in the Reliance district.

A positive outcome was the development of a pro-education group in the community backed by city leaders, professional and business groups, Chamber of Commerce, parents and other interested people.

Appaloosa

General Setting

Appaloosa originated from an 1868 mining camp (and others which followed) and flourished as a small industrial and trading center for a number of years. In 1970 the population was less than 12,000 in a county of 19,000. However, economic development in the form of coal and mineral activity has brought a dramatic influx of population increasing the town size by nearly 150 percent to an estimated 1978 population of 29,000. County population in 1978 is estimated to be 42,800, a growth of 132 percent.

Today, Appaloosa is a virtual boomtown. The inmigrant workforce for four coal-generated power plants and other underground mineral mines plus all the associated service infrastructure resulted in initial severe strains on housing, utilities and essential service sectors (including schools). Mobile home parks have replaced the tent camps, where many of the early wave of construction workers were forced to live. Over 80 percent of students at one elementary school live in such parks.

There are indications that capacities of the new sewage and utilities facilities built to accommodate the boom have already been exceeded. The just completed hospital was already too small according to standard criteria. In the older sections of the community, the pattern of streets is so vaguely defined that mail delivery is difficult because Appaloosa oldtimers refer to the locations of their houses as close to old number 7 or number 11 (former mining camps). The result is a series of narrow winding streets, choked with traffic at times and meandering through an urban sprawl of dwellings and businesses. However, streets in the new sections are more adequate.

The economy is also booming. The county tax base has grown to a healthy $550 million. Over 75 percent of tax revenue comes from taxation on the industrial installations. Estimated per capita income as of 1974 was $5,358 compared to $2,938 in 1970.

The boom in Appaloosa has impacted the social life of the community. The quiet and slow pace of life centered around social activities in churches, schools and traditional groups has been drastically altered. The boom has brought "an entertainment strip" to Appaloosa, a short street of clubs and bars plus reports of drastic rises in crime and vice.

The traditional leadership structure consisting of a part-time mayor and city council has come under local and even national scrutiny concerning their ability to handle the reported vice and crime coming into Appaloosa. The result has been major upheaval in leadership with active campaigns to replace the existing leaders. The seven member school board appears to have maintained its stability and escaped major alterations through the boom. Its membership includes at least one newcomer (wife of power plant official) and represents business as well as professional elements of the community.

Educational System

Like Reliance, Appaloosa is the center for one of two school districts in the county. Appaloosa Independent School District includes four schools outside of Appaloosa: two K-6 schools located 7 miles and 25 miles away respectively, one K-8 school in a small community 60 miles away, and a K-12 school serving two hamlets 40 miles away. Eight elementary schools, two junior high schools and one high school are located in Appaloosa. Officials report long-range plans for another high school and three elementary schools before 1990.

The effects of the boom on total school enrollment are dramatic, resulting in serious overcrowding and shortage of teachers. The number of students has jumped from 3,100 in 1970 to a present high of 5,200, a 68 percent increase. The number crunch was felt most keenly during 1972-73 when enrollment swelled by 500 students in a single year. To respond to the problem, school officials were forced to operate double-shifts at the junior high school and to bus students to reactivated classrooms at outlying schools. Hastily acquired portable buildings were also utilized until a school construction program could be undertaken.

Revenues for operating the school system total approximately $15 million (incuding a $1.9 million carry over) for the 1978-79 school year. The major source of revenue is local ($12.4 million) with $503,000 from the state,[8] and $160,000 from the Federal government, under P.L. 874. This is a per pupil expenditure of $2,238.

Local and county taxes in 1978 for schools are applied as follows: county taxation on a base of $550 million at the rate of 12 mills, (or $1.20 per $100) which is proportionately distributed between the two school districts. Property tax base of $371 million in the school district is also taxed at the rate of 25 mills, or $2.50 per $100. These bases yield $4 million and $8.4 million respectively for total local revenue of $12.4 million. Approximately 75 percent comes from industry and the remaining 25 percent from real estate.

Local sources of revenue are too high for Appaloosa school district to be eligible for funds from the state educational foundation. A small

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[8]Local revenue amount is based on a 91 percent collection rate. State funds are from state land income fund. They are Federal mineral royalties paid to the state and distributed to the local school districts. Appaloosa's local tax revenues are too high for them to qualify for other state aid.

amount of revenue comes from state land income funds, which are Federal mineral royalties paid to the state and distributed to local school districts. Legislation to change old methods of distributing funds on the basis of a population census is pending. Appaloosa officials fear that a recent amendment to the bill calling for "equitable" distribution of the royalties could be interpreted in a way which might have adverse effects for wealthy districts. The school board had officially opposed the bill.

Voters approved total bonds of $11 million for school construction and other improvements in 1973 and 1974. In addition, school districts were given permission through special voter referendum to accumulate $1 million per year of surplus revenue for five years for capital improvements. As a result, one junior high school and two elementary schools had been constructed with a third projected for completion in 1979. Approved capital expenditures also provided for other renovations and improvements of existing structures.

A healthy economic status enabled the school district to hire more and better qualified teachers. In 1978-79, salary for a beginning teacher was $11,100 plus retirement, and life and health insurance benefits. In addition to special education teachers, the present staff provides a comprehensive range of supportive services: counselors, psychologist, speech therapist, occupational therapist, nurses, music teachers, social workers and others.

The boom brought about a rise in social problems among the student body which officials felt were attributable to conditions associated with the growth. Among these were increased truancy, rise in dropouts, increase in alcoholism and drug use among students, and a host of family-related problems including a dramatic rise in child abuse. The rate of student turnover

(average of 50 per month) created a paperwork overload for administrative personnel. Students were frequently in-and-out of schools several times. For example, one student changed schools 13 times during the year. Many high schoolers dropped out before graduation for high wages ($8-9 per hour) working in the mines or power plants.

School-Community Relations

Voter support for school construction is one example of the good relationships between school and community. The school district reciprocates by making its facilities available to the community for recreation, civic, and public affairs. School officials reported that the school-city-county relationships are mutally beneficial.

A state community college located in Appaloosa plays an important role in enhancing school-community relations. The program at the college offers post-secondary credit and noncredit education for all age ranges. Wives of industrial workers take academic or special interest courses with free child-care available to them while Appaloosa high school students take selected courses for joint high school/college credit free-of-charge. These opportunities for continuing education may be a factor in developing a pro-education attitude among Appaloosans.

Responses to Impacts

School officials were faced with a multitude of direct and indirect impacts on schools from rapid growth. Having a strong local financial base, stimulated by the economic boom, provided resources to tackle many of the problems.

With a lag of one to two years, the school officials initiated a building program to at least keep up with the growth. Their rising

budget also facilitated development of an adequate and specialized staff to deal, in part, with some of the social problems.

To counteract the problem of a high rate of dropouts, an alternative school was established. New policies and practices were instituted at the high school to alleviate attendance and truancy problems.

At the elementary level, the general philosophy that "small is good" kept size of elementary schools under 350. Some schools offered "Parent Effectiveness Training" (P.E.T.) for parents. Overall, the authors observed a progressive and innovative response to the direct impacts, although the responses did not necessarily reflect a comprehensive long-range plan for the future.

Officials also had to deal with indirect impacts stemming from situations in other sectors of the community. For example, the housing shortage hampered recruitment of teachers. So the school district paid rent on apartments over the summer months to guarantee a place for incoming teachers to live.

Contrasts

Appaloosa and Reliance demonstrate the social change perspective discussed in Section III. The confrontation theory posits that social systems experiencing rapid change go through a stage of adaptation to the change marked by some social disorganization. Appaloosa and Reliance are two communities confronted with the strains of rapid social change from drastic shifts in population. The process of adaptation is different in each case, with the adaptative capacity influenced by economic and social factors operating in the larger community arena.

Adaptation in Reliance, the community lacking economic growth commensurate with population growth, appears to be weighted more strongly with elements of conflict than cooperation, at least in the short-range. The educational system had been severely impacted by an increase in students far exceeding the physical and staff capacity of the schools, and attempts to find solutions to the problems were generally unsuccessful. Possible long-range gains may be realized through citizen groups contributing to a new and perhaps stronger base of local leadership. For such a leadership to unite in favor of improved schools could benefit the educational sytem. Also, as carriers of diverse attitudes, values, and behavioral and cultural traits, the newcomers open the doors for greater social pluralism in the community.

The balance in Appaloosa, on the other hand, appears to have tilted toward the positive aspects of change. The stronger economic base has facilitated the creation of improved facilities and a stronger school program with more qualified faculty and supportive staff. Growth had brought a rise in social problems but also a more cosmopolitan outlook among Appaloosa students as they were exposed to new ideas and behaviors. An unanticipated long-range consequence of the turnaround for Appaloosa may be the strains on a fragile and limited natural environment. Water is a scarce resource in Appaloosa's county, and the river supplying water to the region was subject to detrimental effects of overload and industrial abuse.

The initial impact of the turnaround on the educational system was student overload. However, the growing economy in Appaloosa coupled with good school-community relations enabled the officials to handle the overcrowding problem more rapidly and effectively than Reliance. The unwillingness of the Reliance voters to bear increased taxation for schools led to

unsatisfactory stop-gap solutions to overcrowding, creating greater dissatisfaction and negative attitudes among community members--a vicious cycle set-in-motion.

While Reliance continues to be faced with severe overcrowding problems, it has not been impacted by noticeable changes in social problems among students. This may be attributed to the sheer magnitude and breadth of growth in Appaloosa where impacts of growth extend far past schools into all functional areas, public and private, of the community.

V. SUMMARY AND IMPLICATIONS

A new turnaround trend of migration back to nonmetro areas in the U.S. has been taking place during the 1970's. There are reasons to believe that the trend will be sustained for at least several more decades.

The turnaround in population simultaneously creates opportunities and causes problems for growing communities. Educational systems are among the first of the service sectors to be impacted by rapid population growth. This report has explored the consequences of rapid population growth on rural education systems.

Summary

A social change framework was used to examine the expected impacts of rapid population growth on rural schools and education. Following Bertrand's confrontation theory, it was anticipated that educational systems confronted with the necessity of adapting to socially disrupting rapid change would go through a period characterized by situations involving both conflict and cooperation.

Four ways that rapid population growth impacts on rural schools and education were examined. (1) An initial impact of rapid growth on education is likely to be a strain on existing facilities to support increased enrollment, resulting in overcrowding and its associated problems. Overcrowding can be a short-range impact for communities which have the economic and public support to alleviate quickly overcrowding with new schools and other capital improvements. For communities unable to initiate satisfactory solutions, overcrowding becomes a persistent problem, sometimes overshadowing all other educational concerns and needs. (2) Another primary impact of rapid growth is on school finances. School districts in areas with a rapidly

growing economy can realize substantial financial benefits through increased local monies available on education. However, the risk is present that public support for education can be negatively impacted through opposition from urban newcomers with values, ideas and expectations about education different from the prevailing ones in the community. (3) Rapid growth also may have short-range negative administrative impacts. Rapid turnover in students results in a paperwork overload. (4) A secondary negative impact of rapid growth on schools is an associated rise in social problems, including school discipline, misuse of drugs and alcohol, child abuse, and family-related problems. This kind of impact is more likely in "boomtown" communities undergoing drastic population and economic growth, where overcrowded and extremely undesirable living conditions result in a general malaise of increased social pathologies particularly affecting homemakers and youth and extending into the school setting. On the other hand, long-range social gains from rapid growth can come in the form of a more cosmopolitan outlook and orientation introduced by new students and their families.

Educational scenarios of two different kinds of rapid growth communities further demonstrated that the impacts of rapid growth on education, as well as how schools and educational populations respond, are significantly influenced by economic and social factors operating in the larger community arena. In Reliance, the prototype of social amenities growth, severe overcrowding was the single, persistent impact. Continuing unwillingness of Reliance voters to bear increased taxation for schools necessitated unsatisfactory stop-gap solutions leading to greater dissatisfaction and negative attitudes toward the schools among community members. Appaloosa exemplified energy-related "boomtown" growth. The rapidly growing economy had been a likely

factor in a successful program of school construction and major capital improvements to ease severe overcrowding. Increased local funds for education had also provided resources to develop a strong, innovative program with a more qualified faculty and extensive supportive staff. Appaloosa's educational system was impacted by a marked rise in social problems among students, an area of impact which continued despite efforts to control and reduce it.

In both school scenarios, an underestimation and underresponse to the problems of rapid growth were very evident. In Appaloosa, construction of the proposed new high school was not started; the new sewage plant nearing completion was already outmoded even for the present population, and the recently completed hospital was too small. School officials in Reliance responded to severe overcrowding with momentary, stop-gap solutions, and community and county officials were taking no apparent steps to avoid a multitude of potential problems stemming from housing developments.

Implications

This analysis demonstrates that schools and educational systems in rapidly growing rural communities will experience both positive and negative effects of the growth process. The major implication is that substantial economic and social costs can be avoided if planning for expected growth occurs early and involves a long-range perspective.

The critical issue becomes the extent to which community leaders should and can anticipate and respond to population growth and its resultant changes which may extend over at least two decades. The penalty for substantial underestimation is the construction of facilities (such as schools, housing, sewage disposal plants) which are realized to be inadequate just as

they are completed. On the other hand, overestimation may result in facilities which are neither needed nor utilized and debts which cannot be paid.

In other words, is it reasonable to expect local communities to bear all of the economic and social costs associated with rapid population growth and particularly with the provision of energy resources essential to national stability?

One position is that in most instances the social and economic benefits to local communities from rapid growth outweighs the costs, and thus they should bear all the costs and responsibilities. Others might argue in favor of outside assistance (regional, state or Federal) which will be "of greatest service to the local level by encouraging local innovation" (see Wheelock, 1978, p. 9).

A third position is that special types of regional, State and Federal assistance are justified beause social and economic costs of rapid growth are large and concentrated when small rural areas are impacted.

Depending on the position one takes, possible initiatives for minimizing the costs and maximizing the benefits of rapid population include actions at local, state and Federal levels.

1. States could enact legislation requiring industries and plants anticipating new or expanded operations to conduct social and economic assessments of the potentially impacted areas (see Nellis, p. 26). One proposed measure even more drastic is the establishment of a workforce ceiling limiting the entry rate of new workers into a community (Peelle, 1978: p. 18).

2. Federal assistance could be in the form of either loans or grants for construction of community facilities, for provision of specialized services

(social welfare, health) and for general planning, should policymakers decide that special types of assistance should be given to communities impacted by rapid growth. The availability of loans could enable economic boom communities to respond to growth needs before the time-lag when the tax base is increased from new sources of industrial revenue. In situations where growth does not bring increased local monies, grants and/or interest-free loans could provide for the construction of schools and essential facilities. Grants for planning could facilitate more accurate estimates of population growth and formulation of alternatives to cope with such growth. They could also help reduce the incidence of expensive retrofitting of public facilities. Federal help could also be offered to local communities in the form of technical assistance developed along the lines of the Extension Service but with greatly expanded service and capabilities (McEntire, 1978: p. 16).

3. Local communities can work through their leaders to develop local, comprehensive planning for rapid growth. Improved communications and negotiations with businesses and industries could result in cooperative, mutually beneficial action. For example, arrangements could be made with industries bringing in a large workforce to supply accurate data concerning needs and characteristics of the workers. In some cases, industries can be persuaded to bear the financial costs associated with new service facilities, housing and public utilities required to support growth.

In summary, an effective planning program requires that communities interact well with state and national organizations (public and private) as well as local interest groups. Interactions among those groups can help to discern the degree to which rural social organization is able to adapt to change brought about by "The Great Population Turnaround." A key aspect of adaptation is the identification of which aspects of change are fixed and inalterable (see Warren, 1963) and which ones can be controlled through programs and policies of planned change. A sense of the ability and willingness to adapt is imperative to rural development policies and outcomes.

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